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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/003,865

11/02/2001

Anuj Batra

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7454

7590

06/01/2005

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EXAMINER

LIU, SHUWANG

ART UNIT

PAPER NUMBER

2634

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,865

Applicant(s)

BATRA ET AL.

Examiner

Shuwang Liu

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-13 is/are rejected.
- 7) ☒ Claim(s) 1-10 and 14-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because informal drawing were filed. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

2. Claims 1-20 are objected to because of the following informalities:
- (1) In claim 1, line 8, change "a" to - -the- -;
 - (2) In claim 2, lines 1 and 2, change "a" to - -the- -, respectively;
 - (3) In claim 3, line 1, change "a" after "from" to - -the- - ;
 - (4) In claim 3, line 2, change "a" to - -the- -;
 - (5) In claim 4, line 2, change each of "the number" to - -a number- -, respectively;
 - (6) In claim 4, line 3, change "a" to - -the- -;
 - (7) In claim 4, line 4, change "the" to -a--;
 - (8) In claim 4, lines 6-7, change "a number" to - -the number- - respectively;
 - (9) In claim 4, line 7, change "a" to - -the- -;

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- (10) In claim 7, line 1, change "channels" to - -channel- -;
- (11) In claim 8, line 1, change "channels" to - -channel- -;
- (12) In claim 9, line 5-6, change "a" to - -the- -, respectively;
- (13) In claim 14, line 1, change "the" to - -a- -;
- (14) In claim 14, line 2, change each of "to a" to - -to the- -, respectively;
- (15) In claim 14, line 3, insert - -to- - after "good window";
- (16) In claim 14, line 4, insert "a number of" before "the good" and "the bad", respectively and insert - -frequency- - before band";
- (17) In claim 15, line 2, change "a" to - -the- -;
- (18) In claim 17, line 5, insert "a number of" before "the good" and "the bad", respectively;
- (19) In claim 17, line 10, insert - -the- - before "good" and bad", respectively;
- (20) In claim 17, lines 12 and 16, change "a" to - -the- -, respectively;
- (21) In claim 19, line 2, change "a" to - -the- -;
- (22) In claim 20, lines 3-4, change all of "the" to - -a- -except for "the frequency";
- (23) In claim 20, line 5, delete "first" and "second";
- (24) In claim 20, line 6, change "the ratio" to - -a ratio- -; and
- (25) In claim 20, lines 16-17, change all of "a" to - -the- - except for "a frequency".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitation "the good channel" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the bad channel" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 13, it is unclear whether "each window" refers to "good window", "bad window", or "good window" and "bad window".

Allowable Subject Matter

5. Claims 1-10 and 14-20 would be allowable if rewritten to overcome the objections, set forth in this Office action.

6. Claims 11-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach and suggest a method of intelligent frequency hopping comprising determining a desired frequency type based on a frequency sequence, using an original hopping sequence to sample an original frequency in the frequency band, and selecting the original frequency as an operating frequency when the original frequency is the desired frequency type.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is 571 272-3036. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shuwang Liu
Primary Examiner
Art Unit 2634

May 27, 2005